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EXAMINER

REIDEL, JESSICA L

ART UNIT PAPER NUMBER

3762

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/731,867	<b>Applicant(s)</b> WAHLSTRAND ET AL.	
	<b>Examiner</b> Jessica L. Reidel	<b>Art Unit</b> 3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☒ Claim(s) 1 and 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/28/04, 06/20/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 1 is objected to because of the following informalities: "the flexible overmold" in line 4 of the Claim lacks antecedent basis. Appropriate correction is required. Examiner suggests changing Claim 1 to read "a flexible overmold" in the previous line 3 of the Claim.
2. Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Both Claim 1 and Claim 3 claim that the overmold is flexible.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 14-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim s 14-17 recites the limitation "the implantable medical device of claim 13, wherein the module comprises" in the first line of each Claim 14-17. There is insufficient antecedent basis for this limitation in the claim because Claim 13 discloses multiple modules of an implantable medical device. The examiner suggests changing each claim to read "the implantable medical device of claim 13, wherein one of the modules comprises".

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faltys et al. (U.S. 6,308,101) (herein Faltys) in view of Casey (U.S. 2003/0004546). Faltys discloses an implantable medical device 170 comprising a plurality of interconnected modules, speech processor 210 and stimulator 212 (see Faltys Abstract, lines 1-4) and an overmold 174 that at least partially encapsulates each of the equivalent speech processor 162 and equivalent stimulator 112' (see Faltys Figs. 3A and 3B). Faltys also discloses that the plurality of interconnected modules are contained in separate, implantable, hermetically sealed cases (see Faltys column 23, lines 12-14).

Faltys differs from Claim 1 and Claim 3 in that the surface of the overmold is not concave along at least one axis and it is not flexible. Casey, however, discloses an implantable medical device made of photocells 180 enclosed in a case laminated into the shape of a "gradual curve" that duplicates the curvature of the cranium and conforms to the implantation sight (see Casey column 3, paragraph 43 and Fig. 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the implantable medical device of Faltys in view of Casey to include a flexible overmold that is concave along at least one axis in order for the device to correctly conform to the implantation sight (i.e. the cranium)

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and to make the device more clinically acceptable by reducing the likelihood of skin erosion on the scalp over the device.

7. In addition to the arguments presented for the rejection of Claim 1, Claim 2 is rejected. Casey further discloses an implantable medical device made of photocells 180 enclosed in a case laminated into the shape of a “gradual curve” that duplicates the curvature of the cranium and conforms to the implantation sight along a top 10 and bottom axis 60 (see Casey Figs. 1 and 4).

8. In addition to the arguments presented for the rejection of Claim 1, Claim 4 is rejected. Faltys further discloses that overmold 174 is made of silicone (see Faltys column 12, line 39).

9. In addition to the arguments presented for the rejection of Claim 1, Claim 5 is rejected. Faltys discloses that overmold 174 is made of silicone rubber further disclosing that overmold 174 is comprised of at least two materials (see Faltys column 12, line 39).

10. In addition to the arguments presented for the rejection of Claim 1, Claim 6 is rejected. Casey further discloses an implantable medical device (see Casey Abstract lines 1-7) made of photocells 180 enclosed in a case laminated into the shape of a “gradual curve” with concave surface 10 (see Casey Fig. 1) that duplicates the curvature of the cranium and conforms to the implantation sight (see Casey column 3, paragraph 43 and Fig. 4).

11. In addition to the arguments presented for the rejection of Claim 1, Claim 7 is rejected. The modified Faltys reference further discloses a surface of the overmold that is concave such that the flexible overmold conforms substantially to an arc (see Casey numeral 10, Fig. 1). The modified Faltys reference differs from Claim 7 in that the radius of the arc is not within a range from 4.5 to 9.5 centimeters. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the radius of the arc of the concaved overmold within a

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range from 4.5 to 9.5 centimeters, since it has been held where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

12. In addition to the arguments presented for the rejections of Claim 1 and Claim 7, Claim 8 is rejected. The modified Faltys reference differs from Claim 8 in that the radius of the arc is not approximately equal to 7 centimeters. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the radius of the arc of the concaved overmold approximately equal to 7 centimeters, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

13. In addition to the arguments presented for the rejections of Claim 1 and Claim 7, Claim 9 is rejected. Casey further discloses an implantable medical device (see Casey Abstract lines 1-7) made of photocells 180 enclosed in a case laminated into the shape of a "gradual curve" (see Casey column 3, paragraph 43 and Fig. 4). The case, or overmold, comprises a first surface 10 capable of being proximate to a cranium of a patient when the implantable medical device is implanted on the cranium (see Casey Figs. 1 and 4) and a second surface 60 that is distal from the cranium when the implantable medical device is implanted on the cranium (see Casey Figs. 1 and 4). The Examiner takes the position that the second surface 60 is disclosed as the shaded portion of implanted device 180 and the first surface 10 resides behind second surface 60 in Casey Fig. 4. The first 10 and second 60 surfaces substantially conform to an arc (see Case Fig. 1).

14. In addition to the arguments presented for the rejection of Claim 1, Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faltys in view of Casey and Berrang et al.

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(U.S. 6,358,281) (herein Berrang). The modified Faltys reference differs from Claim 10 in that the modules are not positioned within the overmold in one of a triangular configuration and a linear configuration.

Berrang, however, discloses an implantable medical device 1 comprised of three interconnected modules 2, 3, and 4, modules 2 and 3 each contained within a housing, and connector bridge 6 that at least partially encapsulates each of the modules (see Berrang Fig. 1). Connector bridge 6 is adapted to allowing the surgeon to better fit the housing sections 2 and 3 to the curvature of the implantee's skull (see Berrang column 9, lines 55-56). Berrang also discloses an implantable medical device 1 where the modules are positioned within the overmold in one of a triangular configuration (see Berrang Figs. 1, 15, and 16) and a linear configuration (see Berrang Figs. 13, 17 and 18) to minimize the "bump" on the skin overlaying the housing sections 2 and 3 (see Berrang column 9, lines 64-66) and to minimize the likelihood of trauma when implanted against the curvature of the implantee's skull (see Berrang column 9, lines 55-56). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the implantable medical device of Faltys in view of Casey and Berrang to include a triangular configuration and a linear configuration to improve the device's ability to fit against a particular patient's cranium.

15. In addition to the arguments presented for the rejection of Claim 1, Claim 11 is rejected. The modified Faltys reference discloses the claimed invention except the overmold 174 does not completely encapsulate each of the modules. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the flexible overmold completely encapsulate each of the modules in order to improve the device's ability to fit the curvature of

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the cranium, since it has been held that rearranging parts of an invention involves only routine skill in the art.

16. In addition to the arguments presented for the rejection of Claim 1, Claim 12 is rejected. Faltys further discloses an implantable medical device 170 comprising a plurality of interconnected modules, speech processor 210 and stimulator 212 (see Faltys Abstract, lines 1-4) and an overmold 174 that at least partially encapsulates each of the equivalent speech processor 162 and equivalent stimulator 112'. Overmold 174 does not encapsulate a portion of each of the modules that is proximate to a cranium of a patient when the implanted medical device is implanted on the cranium (see Faltys Figs. 3A and 3B). Examiner takes the position that the device of Faltys Figs. 3A and 3B is implanted so that the bottom of Fig. 3A is proximate to the cranium of a patient when implanted on the cranium and the top of Fig. 3A, comprising the overmold 174, is distal to the cranium of a patient when implanted on the cranium.

17. In addition to the arguments presented for the rejection of Claim 1, Claim 13 is rejected. Casey further discloses an implantable medical device made of photocells 180 enclosed in a case laminated into the shape of a "gradual curve" that duplicates the curvature of the cranium and conforms to the implantation sight (i.e. proximate to the cranium when implanted on the cranium) (see Casey column 3, paragraph 43 and Fig. 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the interconnected modules of Faltys in view of Casey to each include a housing comprising a surface that is proximate to a cranium when the implantable medical device is implanted on the cranium and a surface of at least one of the modules is concave along at least one axis.



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18. In addition to the arguments presented for the rejections of Claim 1 and Claim 13, Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faltys in view of Casey and Berrang. The modified Faltys reference further discloses an implantable medical device made of photocells 180 enclosed in a case laminated into the shape of a "gradual curve" that duplicates the curvature of the cranium and conforms to the implantation sight along a top 10 and bottom axis 60 (see Casey Figs. 1 and 4). The modified Faltys reference differs from Claim 14 in that the device does not include a control module that includes control electronics.

Berrang, however, discloses an implantable medical device 1 comprised of three interconnected modules 2, 3, and 4, modules 2 and 3 each contained within a housing, and connector bridge 6 that at least partially encapsulates each of the modules (see Berrang Fig. 1). Connector bridge 6 is adapted to allowing the surgeon to better fit the housing sections 2 and 3 to the curvature of the implantee's skull (see Berrang column 9, lines 55-56). Berrang also discloses various electronics within a housed module 21 used for controlling the current pulses emitted by the device (see Berrang Fig. 2 and column 4, line 18 and lines 22-23). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a module of Faltys in view of Casey and Berrang to comprise a control module that includes control electronics and to make the surface of the housing concave along two axes to better fit the curvature of the implantee's skull and to control the stimulating electrical pulses emitted by the device.

19. In addition to the arguments presented for the rejections of Claim 1 and Claim 13, Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faltys in view of Casey and Berrang. The modified Faltys reference further discloses an implantable medical device made of

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photocells 180 enclosed in a case laminated into the shape of a “gradual curve” that duplicates the curvature of the cranium and conforms to the implantation sight along a top axis 10 (see Casey Figs. 1 and 4). The modified Faltys reference differs from Claim 15 in that the device does not include a module that is a power source that includes a battery with a wound coil construction.

Berrang, however, discloses an implantable medical device 1 comprised of three interconnected modules 2, 3, and 4, modules 2 and 3 each contained within a housing, and connector bridge 6 that at least partially encapsulates each of the modules (see Berrang Fig. 1). Connector bridge 6 is adapted to allowing the surgeon to better fit the housing sections 2 and 3 to the curvature of the implantee’s skull (see Berrang column 9, lines 55-56). Berrang also discloses a module that is a power source module including a battery (see Berrang column 4, lines 32-34) and teaches that such a design would be used in conjunction with an externally-worn head mounted inductively coupled power input device worn by the implantee (see Berrang column 4, lines 42-45). Berrang also discloses an external coil inductively coupling electrical power to an implanted receiving coil 4 (see Berrang Abstract and Fig. 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Faltys in view of Casey and Berrang to include a power source module that includes a battery with a wound coil construction to improve induction of an external power signal to the internal device and to make the surface of the housing and the wound coil battery concave along one axis to fit the curvature of the implantee’s skull.

20. In addition to the arguments presented for the rejections of Claim 1 and Claim 13, Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faltys in view of Casey and

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Berrang. The modified Faltys reference further discloses an implantable medical device made of photocells 180 enclosed in a case laminated into the shape of a “gradual curve” that duplicates the curvature of the cranium and conforms to the implantation sight along a top axis 10 (see Casey Figs. 1 and 4). The modified Faltys reference differs from Claim 16 in that the device does not include a module that is a power source that includes a battery with a foil pack construction.

Berrang, however, discloses an implantable medical device 1 comprised of three interconnected modules 2, 3, and 4, modules 2 and 3 each contained within a housing, and connector bridge 6 that at least partially encapsulates each of the modules (see Berrang Fig. 1). Connector bridge 6 is adapted to allowing the surgeon to better fit the housing sections 2 and 3 to the curvature of the implantee’s skull (see Berrang column 9, lines 55-56). Berrang also discloses a module that is a power source module including a battery (see Berrang column 4, lines 32-34) within a housing that is mounted on an insulated substrate further bonded to an underlying gold foil substrate (see Berrang column 3, lines 38-39 and lines 49-50) to provide biocompatibility and pliability, and to provide a means for activating a snap dome, or piezoactuator, by pushing against the outside skin overlaying the foil to add user control to the device (see Berrang column 16, lines 40-45). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Faltys in view of Casey and Berrang to include a power source module that includes a battery with a foil pack construction to provide biocompatibility and pliability, and a means for user control of the device, and to make the surface of the housing and the foil pack battery concave along one axis, to fit the curvature of the implantee’s skull.

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21. In addition to the arguments presented for the rejections of Claim 1 and Claim 13, Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faltys in view of Casey and Berrang. The modified Faltys reference further discloses an implantable medical device made of photocells 180 enclosed in a case laminated into the shape of a “gradual curve” that duplicates the curvature of the cranium and conforms to the implantation sight along a first top axis 10 and second bottom axis 60 (see Casey Figs. 1 and 4). The modified Faltys reference differs from Claim 17 in that the device does not include a module comprising a recharge module that includes a recharge coil for inductively receiving energy.

Berrang, however, discloses an implantable medical device 1 comprised of three interconnected modules 2, 3, and 4, modules 2 and 3 each contained within a housing, and connector bridge 6 that at least partially encapsulates each of the modules (see Berrang Fig. 1). Connector bridge 6 is adapted to allowing the surgeon to better fit the housing sections 2 and 3 to the curvature of the implantee’s skull (see Berrang column 9, lines 55-56). Berrang also discloses a device 1 comprising rechargeable battery 18 that includes recharge coil 4 for inductively receiving energy (see Berrang column 12, lines 47-54) so that battery 18 can be conveniently recharged. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Faltys in view of Casey and Berrang to include a recharge module that includes a recharge coil for inductively receiving energy in order to conveniently recharge the battery, and to make the surface of the housing and the coil concave along two axes to better fit the curvature of the implantee’s skull.

22. In addition to the arguments presented for the rejections of Claim 1 and Claim 13, Claim 18 is rejected. Casey further discloses an implantable medical device (see Casey Abstract lines

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1-7) made of photocells 180 enclosed in a case laminated into the shape of a “gradual curve” with concave surface 10 (see Casey Fig. 1) that duplicates the curvature of the cranium and conforms to the implantation sight (see Casey column 3, paragraph 43 and Fig. 4).

23. In addition to the arguments presented for the rejections of Claim 1 and Claim 13, Claim 19 is rejected. The modified Faltys reference further discloses a surface of the overmold that is concave such that the flexible overmold conforms substantially to an arc (see Casey numeral 10, Fig. 1). The modified Faltys reference differs from Claim 19 in that the radius of the arc is not within a range from 4.5 to 9.5 centimeters. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the radius of the arc of the concaved overmold within a range from 4.5 to 9.5 centimeters, since it has been held where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

24. In addition to the arguments presented for the rejections of Claim 1, Claim 13, and Claim 19, Claim 20 is rejected. The modified Faltys reference differs from Claim 20 in that the radius of the arc is not approximately equal to 7 centimeters. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the radius of the arc of the concaved overmold approximately equal to 7 centimeters, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

25. In addition to the arguments presented for the rejections of Claim 1, Claim 13, and Claim 19, Claim 21 is rejected. Casey further discloses an implantable medical device (see Casey Abstract lines 1-7) made of photocells 180 enclosed in a housing laminated into the shape of a “gradual curve” (see Casey column 3, paragraph 43 and Fig. 4). The housing comprises a first

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surface 10 capable of being proximate to a cranium of a patient when the implantable medical device is implanted on the cranium (see Casey Figs. 1 and 4) and a second surface 60 that is distal from the cranium when the implantable medical device is implanted on the cranium (see Casey Figs. 1 and 4). The Examiner takes the position that the second surface 60 is disclosed as the shaded portion of implanted device 180 and the first surface 10 resides behind second surface 60 in Casey Fig. 4. The first 10 and second 60 surfaces substantially conform to an arc (see Case Fig. 1).

26. In addition to the arguments presented for the rejection of Claim 1, Claim 22 is rejected. Faltys further discloses an implantable medical device 170 comprising a therapy delivery circuit 112 to deliver stimulation to a patient, capable of stimulating the brain, and control electronics 138 to control the delivery of stimulation by therapy delivery circuit 112 (see Faltys column 6, lines 58-59 and column 8, lines 50-51). The modified Faltys reference discloses the claimed invention except the therapy delivery circuit and control electronics are not located within one of the modules. It would have been obvious to one having ordinary skill in the art at the time the invention was made make the device comprise a therapy delivery circuit and control electronics located within one of the implantable modules, since it has been held that rearranging parts of an invention involves only routine skill in the art.

27. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faltys et al. (U.S. 6,308,101) (herein Faltys) in view of Casey (U.S. 2003/0004546). Faltys discloses an implantable medical device 170 comprising a plurality of interconnected modules, speech processor 210 and stimulator 212 (see Faltys Abstract, lines 1-4) and an overmold 174 that at least partially encapsulates each of the equivalent speech processor 162 and equivalent stimulator

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112' (see Faltys Figs. 3A and 3B). Faltys also discloses that the plurality of interconnected modules are contained in separate, implantable, hermetically sealed housings (see Faltys column 23, lines 12-14).

Faltys differs from Claim 23 in that the surface of the housing is not concave along at least one axis such that the surface conforms substantially to an arc. Casey, however, discloses an implantable medical device made of photocells 180 enclosed in a case laminated into the shape of a "gradual curve" that duplicates the curvature of the cranium and conforms to the implantation sight (see Casey column 3, paragraph 43 and Fig. 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the implantable medical device of Faltys in view of Casey to include a housing that is concave along at least one axis in order for the device to correctly conform to the implantation sight (i.e. the cranium) and to make the device more clinically acceptable by reducing the likelihood of skin erosion on the scalp over the device.

The modified Faltys reference further discloses a surface 10 that is concave such that it conforms substantially to an arc (see Casey numeral 10, Fig. 1). The modified Faltys reference differs from Claim 23 in that the radius of the arc is not within a range from 4.5 to 9.5 centimeters. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the radius of the arc of the concaved housing within a range from 4.5 to 9.5 centimeters, since it has been held where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

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28. In addition to the arguments presented for the rejection of Claim 23, Claim 24 is rejected. The modified Faltys reference differs from Claim 24 in that the radius of the arc is not approximately equal to 7 centimeters. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the radius of the arc of the concaved housing approximately equal to 7 centimeters, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

29. In addition to the arguments presented for the rejection of Claim 23, Claim 25 is rejected. Casey further discloses an implantable medical device made of photocells 180 enclosed in a case laminated into the shape of a "gradual curve" that duplicates the curvature of the cranium and conforms to the implantation sight along a top 10 and bottom axis 60 (see Casey Figs. 1 and 4).

30. In addition to the arguments presented for the rejection of Claim 23, Claim 26 is rejected. Casey further discloses an implantable medical device (see Casey Abstract lines 1-7) made of photocells 180 enclosed in a housing laminated into the shape of a "gradual curve" (see Casey column 3, paragraph 43 and Fig. 4). The housing comprises a first surface 10 capable of being proximate to a cranium of a patient when the implantable medical device is implanted on the cranium (see Casey Figs. 1 and 4) and a second surface 60 that is distal from the cranium when the implantable medical device is implanted on the cranium (see Casey Figs. 1 and 4). The Examiner takes the position that the second surface 60 is disclosed as the shaded portion of implanted device 180 and the first surface 10 resides behind second surface 60 in Casey Fig. 4. The first 10 and second 60 surfaces substantially conform to an arc (see Case Fig. 1).

31. In addition to the arguments presented for the rejection of Claim 23, Claim 27 is rejected. Faltys further discloses an implantable medical device 170 comprising a therapy delivery circuit



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112 to deliver stimulation to a patient, capable of stimulating the brain, and control electronics 138 to control the delivery of stimulation by therapy delivery circuit 112 (see Faltys column 6, lines 58-59 and column 8, lines 50-51). The modified Faltys reference discloses the claimed invention except the therapy delivery circuit and control electronics are not located within one of the modules. It would have been obvious to one having ordinary skill in the art at the time the invention was made make the device comprise a therapy delivery circuit and control electronics located within one of the implantable modules, since it has been held that rearranging parts of an invention involves only routine skill in the art.

### *Conclusion*

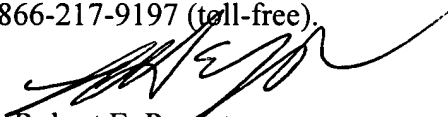
32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kirkpatrick et al. (U.S. 6,480,743) (herein Kirkpatrick) discloses an implantable neurostimulator 110 adapted to provide electrical brain stimulation that comprises a power module and another module comprising a therapy delivery circuit 424 to deliver brain stimulation (see Kirkpatrick column 14, lines 11-13) and control electronics CPU 428 to control the therapy delivery circuit (see Kirkpatrick column 12, line 56). It would have been obvious to apply the teaching of interconnected modules encapsulated in a concave overmold to the device of the Kirkpatrick reference in order to suitably conform the device to the implantation site (i.e. proximate to the cranium). Reischl et al. (U.S. 6,176,879) (herein Reischl) discloses a concave implantable medical device conforming to the implantation site in order to minimize any bulges in the skin after implantation (see Reischl column 1, lines 64-67).

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33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica L. Reidel whose telephone number is (571) 272-2129. The examiner can normally be reached on Mon-Thurs 7-4:30 and every other Friday 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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